STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY SUPERVISOR OF WELLS

IN THE MATTER OF

THE PETITION OF CORE ENERGY, LLC, FOR

AN ORDER FROM THE SUPERVISOR OF

WELLS FORMING A 160-ACRE GUELPH

DOLOMITE/RUFF FORMATION DRILLING UNIT

AS AN EXCEPTION TO SPECIAL ORDER 1-73

AND FOR STATUTORY POOLING ALL

INTERESTS INTO THE DRILLING UNIT IN

OTSEGO LAKE TOWNSHIP, OTSEGO COUNTY,

MICHIGAN.

OPINION AND ORDER

This case involves the Petition of Core Energy, LLC (Petitioner) to drill and complete the proposed State Otsego Lake 8-15B well within the stratigraphic interval known as the Guelph/Dolomite Ruff Formation. The Petitioner is requesting a 160-acre drilling unit for the State Otsego Lake 8-15B well as an exception to Special Order 1-73. The proposed unit consists of the SE ¼ SW ¼ and SW ¼ SE ¼ of Section 10, and the NE ¼ NW ¼ and the NW ¼ NE ¼ of Section 15, T29N, R3W, Otsego Lake Township, Otsego County, Michigan. Since not all of the mineral owners within the proposed drilling unit have agreed to voluntarily pool their interests, the Petitioner also seeks an Order of the Supervisor of Wells (Supervisor) designating the Petitioner as Operator of the proposed 160-acre drilling unit and requiring statutory pooling of all tracts and interests within that geographic area where the owners have not agreed to voluntary pooling.

JURISDICTION

The development of oil and gas in this state is regulated under Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, Michigan Compiled Laws 324.61501 *et seq.* The purpose of Part 615 is to ensure the orderly development and production of the oil and gas resources of this state. MCL 324.61502. To that end, the Supervisor may establish drilling units and statutorily pool mineral interests within said units. MCL 324.61513(2) and (4). However, the

formation of drilling units by statutory pooling of interests can only be effectuated after an evidentiary hearing. 2015 AACS, R 324.302 and R 324.304. The evidentiary hearing is governed by the applicable provisions of the Administrative Procedures Act, 1969 PA 306, as amended, MCL 24.201 *et seq.* See 1996 AACS, R 324.1203. The evidentiary hearing in this matter was set for March 8, 2021.

FINDINGS OF FACT

The Petitioner specifically requests that the Supervisor issue an Order that:

- 1. Grants an exception to the drilling unit size established by Special Order 1-73, as amended, by establishing a 160-acre drilling unit for the proposed State Otsego Lake 8-15B well, consisting of the SE ¼ SW ¼ and SW ¼ SE ¼ of Section 10, and the NE ¼ NW ¼ and the NW ¼ NE ¼ of Section 15, T29N, R3W, Otsego Lake Township, Otsego County, Michigan. The proposed drilling unit overlaps with an existing active 160-acre drilling unit previously established for the Styles 1-10 HD well (PN 53360) in the SW/4 SE/4 of Section 10. This well is currently owned and operated by Lambda Energy Resources, LLC (Lambda) and is completed within the Guelph/Dolomite Ruff Formation.
- 2. Requires statutory pooling of all tracts and mineral interests within the proposed Guelph/Dolomite Ruff Formation drilling unit that have not agreed to voluntary pooling.
 - 3. Names the Petitioner as Operator of the State Otsego Lake 8-15B well.
- 4. Authorizes the Petitioner to recover certain costs and other additional compensation from the parties subject to the statutory pooling order.
- 5. Requests that this Order apply to the State Otsego Lake 8-15B well and if deemed necessary, to any wells directionally redrilled therefrom.
- 6. Grants the Petitioner two (2) years from the effective date of the order to commence drilling of the State Otsego Lake 8-15B well.

The Supervisor determined that the Notice of Hearing was properly served and published. No answers to the Petition or appearances were filed; therefore, the Petitioner is the only party to this case. The Supervisor designated the hearing to be an uncontested

evidentiary hearing pursuant to R 324.1205(1)(c), and directed evidence be presented in the form of verified statements pursuant to R 324.1205(2).

In support of its case, the Petitioner offered the verified statements of Allen Modroo, Exploration Manager for Petitioner, Kim Sanders, Land Manager for the Petitioner, and Rick Pardini, Engineering Manager for the Petitioner.

I. Drilling Unit

The spacing of the wells in Otsego County targeting the Guelph/Dolomite Ruff Formation is governed by Special Order No. 1-73, as amended. This Order establishes drilling units of 80-acres. Under Special Order 1-73, as amended, it is presumed that one well will efficiently and economically drain the 80-acre drilling unit of hydrocarbons. The Petitioner's proposed 160-acre drilling unit is described as the SE ½ SW ½ and SW ½ SE ½ of Section 10, and the NE ½ NW ¼ and the NW ½ NE ½ of Section 15, T29N, R3W, Otsego Lake Township, Otsego County, Michigan. The Petitioner proposes to drill and complete the State Otsego Lake 8-15B well in the Guelph/Dolomite Ruff Formation.

The proposed unit overlaps 40 acres of the existing 160-acre drilling unit for the Styles 1-10 HD (PN 53360) well in the SW ¼ of the SE ¼ of Section 10. As the Styles 1-10 HD well is a producing Guelph/Dolomite Ruff Formation well, the Petitioner seeks to respect the existing Pooling Declaration and Statutory Pooling Order, if any, as to this unit. The Petitioner seeks to allocate production from the proposed State Otsego Lake 8-15B well, if established, on a net mineral acre basis with the proposed 160-unit, including allocation to the acreage lying within the Styles 1-10 HD unit. Production allocated to this overlapping 40-acre tract will be distributed pursuant to the respective Pooling Declarations and/or the applicable Supervisor of Wells Orders.

Mr. Modroo testified that his analysis of available well control in the area, review of the Guelph/Dolomite Ruff production and development in the vicinity, and all available seismic data supports the proposed bottom hole well location as the optimal location to maximize the likelihood for a successful well within the proposed 160-acre drilling unit,

hence the need to overlap the proposed drilling unit with that of the Styles 1-10 HD. Mr. Modroo sponsored Exhibit 2 to present the details of the proposed State Otsego Lake 8-15B well more fully. Mr. Modroo testified that the proposed well should adequately and efficiently drain the proposed 160-acre drilling unit. Mr. Modroo further testified that based on his review of the well control, drilling history in the two drilling units, and the available seismic data, it is his belief that the reefs of the State Otsego Lake 8-15B and the Styles 1-10 HD are not in communication with each other. In Mr. Modroo's view, the proposed well will prevent waste by the drilling of one well on a 160-acre drilling unit, rather than a well on 80-acre drilling units.

I find that formation of the proposed 160-acre drilling unit, as an exception to Special Order No. 1-73, will prevent waste and protect correlative rights, and as such, is approved for the proposed State Otsego Lake 8-15B well, and if deemed necessary, any subsequent directional redrill(s).

II. Drilling Unit Operator

Mr. Sanders sponsored Exhibit 1 to present the proposed 160-acre drilling unit. In his testimony, Mr. Sanders stated that the Petitioner holds or controls at least 83.33% of the unit working interest of oil and gas leases covering the NE ¼ NW ¼ and NW ¼ NE ¼ of Section 15 (80 acres) and holds or controls 100% of the working interest on all the oil and gas leases in the SE ¼ SW ¼ and SW ¼ SE ¼ of Section 10 (80 acres), in the proposed drilling unit. Subsequent to his submitted testimony, Mr. Sanders indicated to the Supervisor that the Petitioner has secured the remaining 16.67% working interest in the NE/4 NW/4 and NW/4 NE/4 of Section 15, and therefore holds 100% of the working interest in the proposed drilling unit.

Mr. Sanders further testified that Lambda has been informed of the Petitioner's planned State Otsego Lake 8-15B well and the proposal for overlapping units, and consents to the proposed overlapping units. Given this, the Petitioner seeks to be designated as the Operator of the State Otsego Lake 8-15B well. I find, as a Matter of Fact, the Petitioner is eligible to be designated Operator of the State Otsego Lake 8-15B well.

III. Statutory Pooling

The Petitioner was unable to obtain the agreement of all mineral owners to gain full control of the proposed unit. The Petitioner may not produce on a well on the drilling unit without first obtaining control of all the oil and gas interests. In cases like this, it is necessary for the Petitioner to request statutory pooling from the Supervisor. As discussed, a mineral owner who does not agree to voluntarily pool his or her interest in a drilling unit may be subject to statutory pooling. 2015 AACS, R 324.304. The statutory pooling of an interest must be effectuated in a manner that ensures "each owner . . . is afforded the opportunity to receive his or her just and equitable share of the production of the unit." *Id.* In addition to protecting correlative rights, the statutory pooling must prevent waste. MCL 324.61502. An Operator must first seek voluntary pooling of mineral interests within a proposed drilling unit prior to obtaining statutory pooling through and Order of the Supervisor.

Mr. Sanders verified statement states that the Petitioner controls or holds oil and gas leases covering approximately 158.27 net mineral acres of oil and gas interest within the proposed 160-acre drilling unit. In addition, he testified that the Petitioner has made several attempts to obtain ratifications of the Pooling Declaration from the unratified royalty owners, who own approximately 1.73 net mineral acres in the proposed unit. Mr. Sanders included an affidavit, summarizing the Petitioner's ratification efforts as Exhibit 3. As of the date of the hearing, the following royalty owners have not agreed to voluntarily pool their interests:

Name	Interest Type	Net Acres	Interest	Description T29N-R03W
Susan Hunter	RI	0.10	0.25%	Section 10: SW/4 SE/4
Bob Millikin	RI	0.04	0.11%	Section 10: SW/4 SE/4
David Phillip Wood	RI	0.29	0.74%	Section 10: SW/4 SE/4
The Estate of Edmund L Wood, c/o Sharon Ann Wood	RI	0.20	0.49%	Section 10: SW/4 SE/4
Michael E. Millikin	RI	0.03	0.08%	Section 10: SW/4 SE/4
Steven D. Millikin	RI	0.03	0.08%	Section 10: SW/4 SE/4
Suzanne A. Millikin	RI	0.03	0.08%	Section 10: SW/4 SE/4
Sandra Sue Hunsucker	RI	0.03	0.08%	Section 10: SW/4 SE/4
The Estate of Frank Millikin	RI	0.12	0.29%	Section 10: SW/4 SE/4

Name	Interest Type	Net Acres	Interest	Description T29N-R03W
The Revocable Trust of Gloria Ann Stephen dated 11/24/2008, Diane	RI	0.15	0.37%	Section 10: SW/4 SE/4
Adkison as POA				
Legacy Royalties Ltd	RI	0.12	0.29%	Section 10: SW/4 SE/4
Marian Parkinson	RI	0.04	0.11%	Section 10: SW/4 SE/4
Penny Millikin	RI	0.04	0.11%	Section 10: SW/4 SE/4
The Estate of Richard Wood	RI	0.20	0.49%	Section 10: SW/4 SE/4
Shirley J Matthews	RI	0.29	0.74%	Section 10: SW/4 SE/4

Total Net acres: 1.73

Mr. Modroo's verified statement establishes that the Petitioner has studied the proposed drilling unit and determined the optimal bottom hole location for the proposed well based on geological and seismic studies. The bottom hole location is shown on the Petitioner's Exhibit 1.

I find that the State Otsego Lake 8-15B well will avoid waste or the potential for waste to occur, and therefore, should be approved.

Based on the foregoing, I find, as a Matter of Fact:

- 1. The Petitioner was unable to voluntarily pool all of the mineral interests in the proposed 160-acre drilling unit as described herein.
- 2. Statutory pooling is necessary to form a full drilling unit, to protect correlative rights of unratified mineral owners, and to prevent waste by preventing the drilling of unnecessary wells.

Now that it has been determined that statutory pooling is necessary and proper in this case, the terms of such pooling must be addressed. When pooling is ordered, the working interest owner of the statutorily pooled lands ("Pooled Owner") is provided an election on how it wishes to share in the costs of the project. 2015 AACS, R 324.1206(4). A Pooled Owner may participate in the project or, in the alternative, be "carried" by the Operator. If the Pooled Owner elects to participate, it assumes the economic risks of the project, specifically, by paying its proportionate share of the costs or giving bond for the payment. Whether the well drilled is ultimately a producer or dry hole is immaterial to this obligation. Conversely, if a Pooled Owner elects not to participate, the Pooled Owner is,

from an economic perspective, "carried" by the Operator. Under this option, if the well is a dry hole, the Pooled Owner has no financial obligation because it did not assume any risk. If the well is a producer, the Supervisor considers the risks associated with the proposal and designates the Operator additional compensation, out of production, for assuming all of the economic risks.

In order for a Pooled Owner to decide whether it will "participate" in the well or be "carried" by the Operator, it is necessary to provide reliable cost estimates. In this regard, the Petitioner must present proofs on the estimated costs involved in drilling, completing, and equipping the proposed well. Mr. Pardini's testimony stated that the well will recover hydrocarbons of a sufficient volume to economically justify the cost of the well. Mr. Pardini sponsored Exhibit 4, Petitioner's Authorization for Expenditure (AFE) for the State Otsego Lake 8-15B well, which itemizes the estimated costs to be incurred in the drilling, completing, equipping, and plugging of the well. The estimated costs to be incurred in drilling, completing, and equipping the well to the Guelph/Dolomite Ruff Formation are \$898,870 for drilling; \$536,130 for completion; and \$1,401,000 for equipping. The total estimated producing well cost for the State Otsego Lake 8-15B well is \$2,836,000. There is no evidence on this record refuting these estimated costs.

I find, as a Matter of Fact, the estimated costs in Exhibit 4 are reasonable for the purpose of providing the pooled owner a basis on which to elect to participate or be carried. However, I find actual costs shall be used in determining the final share of costs and additional compensation assessed against the Pooled Owner.

The next issue is the allocation of these costs. Part 615 requires the allocation be just and equitable. MCL 324.61513(4). It is Mr. Pardini's opinion that a 160-acre drilling unit is necessary to provide equitable treatment to all mineral owners within the unit. The Petitioner requests the actual well costs and production from the well be allocated based upon the ratio of the number of mineral acres in the tracts of the various owners to the total number of mineral acres in the drilling unit. Established practices and industry standards suggest this to be a fair and equitable method of allocation of production and costs. Therefore, I find, as a Matter of Fact, utilizing net mineral acreage is a fair and equitable method to allocate to the various tracts in the proposed drilling unit each tract's

just and equitable share of unit production and costs. I find that an owner's share in production and costs should be in proportion to their net mineral acreage.

The final issue is the additional compensation for risk to be assessed against a Pooled Owner who elects to be carried. The Administrative Rules, under Part 615, provide for the Supervisor to assess appropriate compensation for the risks associated with drilling a dry hole and the mechanical and engineering risks associated with the completion and equipping of wells. 2015 AACS, R 324.1206(4)(b). The Petitioner requests additional compensation of 300 percent for the costs of drilling, 200 percent of completing, and 100 percent of equipping the State Otsego Lake 8-15B well.

Mr. Pardini testified that the risk associated with drilling the proposed well is significant as this is essentially an exploratory well due to the nature of the reservoir and the distance to the nearest producing well. He stated there are many mechanical and engineering risks associated with completing and equipping the well in addition to the risk of the well not being economically successful.

I find the Petitioner did present substantial evidence to show that the risks associated with drilling the well justify a 300 percent penalty. Moreover, past experience shows that drilling results are not always a reliable indicator of whether completing and equipping costs can be fully recovered from eventual production revenues. I find, as a Matter of Fact, the risk of the proposed State Otsego Lake 8-15B well being a dry hole supports additional compensation from the Pooled Owners of 300 percent of the actual drilling costs incurred. I find the mechanical and engineering risks associated with the well support additional compensation of 200 percent of the actual completing and 100 percent of the actual equipping costs incurred. Operating costs are not subject to additional compensation for risk.

CONCLUSIONS OF LAW

Based on the Findings of Fact, I conclude, as a matter of law:

1. The Petitioner was unable to voluntarily pool all mineral interests within the proposed drilling unit. The Supervisor may statutorily pool properties when pooling cannot be agreed upon. Statutory pooling is necessary to prevent waste and protect the correlative rights of the Pooled Owner in the proposed drilling unit. MCL 324.61513(4).

- 2. This Order is necessary to provide for conditions under which each mineral owner who has not voluntarily agreed to pool all their interest in the pooled unit may share in the working interest share of production. 2015 AACS, R 324.1206(4).
- 3. The Petitioner is an owner within the drilling unit; and therefore, is eligible to drill and operate the State Otsego Lake 8-15B well. 2015 AACS, R 324.1206(4).
- 4. The Petitioner is authorized to take from each nonparticipating interest's share of production the cost of drilling, completing, equipping, and operating the well, plus an additional percentage of the costs as the Supervisor considers appropriate for the risks associated with drilling dry hole, and the mechanical and engineering risks associated with completion and equipping of the well. 2015 AACS, R 324.1206(4).
- 5. Spacing for the wells drilled in Otsego County to the Guelph/Dolomite Ruff Formation is 80-acres as set by Special Order No. 1-73, as amended. Exceptions to Special Order No. 1-73 may be granted by the Supervisor after a hearing.
- 6. The Supervisor has jurisdiction over the subject matter and the persons interested therein.
- 7. Due notice of the time, place, and purpose of the hearing was given as required by law and all interested persons were afforded an opportunity to be heard. 2015 AACS, R 324.1204.

DETERMINATION AND ORDER

Based on the Findings of Fact and the Conclusions of Law, the Supervisor determines that statutory pooling to form a 160-acre Guelph/Dolomite Ruff Formation drilling unit is necessary to protect the correlative rights and prevent waste by the drilling of unnecessary wells.

NOW, THEREFORE, IT IS ORDERED:

1. A 160-acre Guelph/Dolomite Ruff Formation drilling unit is established, as an exception to Special Order No. 1-73, for the State Otsego Lake 8-15B well comprising the SE ¼ SW ¼ and SW ¼ SE ¼ of Section 10, and the NE ¼ NW ¼ and NW ¼ NE ¼ of Section 15, T29N, R3W, Otsego Lake Township, Otsego County, Michigan. All properties, parts of properties, and interests in this area are pooled into the drilling unit.

This pooling is for the purpose of forming a drilling unit only. This unit overlaps and shares a common 40-acre parcel, the SW/4 SE/4 of Section 10, with the 160-acre drilling unit of the Styles 1-10 HD well.

- 2. Each Pooled Owner shall share in production and costs in the proportion that their net mineral acre in the drilling unit bears to the total acreage in the drilling unit.
- 3. The Petitioner is named Operator of the State Otsego Lake 8-15B well. The Operator shall commence the drilling of the State Otsego Lake 8-15B well within 2 years from the effective date of this Order, or the statutory pooling authorized in this Order shall be null and void as to all parties and interests. This pooling Order applies to the drilling of the State Otsego Lake 8-15B well, and if deemed necessary, any directional redrills.
- 4. A Pooled Owner shall be treated as a working interest owner to the extent of 100 percent of the interest owned in the drilling unit. The Pooled Owner is considered to hold or be subject to a 1/8 royalty interest, which shall be free of any charge for costs of drilling, competing, or equipping the well, or for compensation for the risks of the well or operating the proposed well including post-production costs.
- 5. A Pooled Owner shall have ten (10) days from the effective date of this Order to select one of the following alternatives and advise the Supervisor and the Petitioner, in writing, accordingly:
- a. To participate, then within ten (10) days of making the election (or within a later date as approved by the Supervisor), pay to the Operator the Pooled Owner's share of the estimated costs for drilling, completing, and equipping the well, or give bond to the operator for the payment of the Pooled Owner's share of such cost promptly upon completion; and authorize the Operator to take from the Pooled Owner's remaining 7/8 share of production, the Pooled Owner' share of the actual costs of operating the well; or
- b. To be carried, then if the well is put on production, authorize the Operator to take from the Pooled Owner's remaining 7/8 share of production:
- (i) The Pooled Owner's share of the actual cost of drilling, completing, and equipping the well.

- (ii) An additional 300 percent of the actual drilling costs, 200 percent of the actual completion costs, and 100 percent of the actual equipping costs attributable to the Pooled Owner's share of production, as compensation to the Operator for the risk of a dry hole.
 - (iii) The Pooled Owner's share of the actual cost of operating the well.
- 6. In the event the Pooled Owner does not notify the Supervisor, in writing, of the decision with ten (10) days from the effective date of this Order, the Pooled Owner will be deemed to have elected the alternative described in Paragraph 5(b). If a Pooled Owner who elects the alternative in Paragraph 5(a) does not, within ten (10) days of making their election (or within any alternate date approved by the Supervisor), pay their proportionate share of costs or give bond for the payment of such share of such costs, the Pooled Owner shall be deemed to have elected the alternative described in Paragraph 5(b), and the Operator may proceed to withhold and allocate proceeds for costs from the Pooled Owner's 7/8 share of production as described in Paragraph 5(b)(1), (ii) and (iii).
- 7. For purposes of the Pooled Owner electing an alternative, the amounts of \$898,870 for estimated drilling costs; \$536,130 for estimated completion costs; and \$1,401,000 for estimated equipping costs are fixed as well costs. Actual costs shall be used in determining the Pooled Owner's final share of well costs. If a Pooled Owner has elected the alternative in Paragraph 5(a) and the actual cost exceeds the estimated cost, the Operator may recover the additional cost from the Pooled Owner's 7/8 share of production. Within sixty (60) days after commencing drilling of the well, and every thirty (30) days thereafter until all costs of drilling, completing, and equipping the well are accounted for, the Operator shall provide to the Pooled Owner a detailed statement of actual costs incurred as of the date of the statement and all costs and production proceeds allocated to that Pooled Owner.
- 8. The Operator shall certify to the Supervisor that the following information was supplied to each Pooled Owner no later than the effective date of the Order:
 - a. The Order;
 - b. The AFE;

- c. Each Pooled Owner's percent of charges from the AFE if the Pooled Owner were to choose option "a" in Paragraph 5, above. Failure to provide the information above, by the effective date of this Order will result in the nullification of this Order, thereby rendering the statutory pooling null and void as to all parties.
- 9. A Pooled Owner shall remain a Pooled Owner only until such time as a lease or operating agreement is entered into with the Operator. At that time, terms of the lease or operating agreement shall prevail over terms of this Order.
- 10. This Order shall terminate immediately after the State Otsego Lake 8-15B well, and all subsequent directional redrills therefrom on the drilling unit, have been plugged and abandoned.
 - 11. The Supervisor retains jurisdiction in this matter.
 - 12. The effective date of this Order is <u>17 May 2021</u>.

Dated:	7 May 2021	

Adam W. Wygant
ASSISTANT SUPERVISOR OF WELLS
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